

**IN THE CLAIMS:**

Please amend claims as follows:

Claims 1-14 (Previously Canceled)

B' Claim 15 (Currently Amended): An information recording system for recording information in an optical recording medium comprising:

- a driving component for driving the optical recording medium; and
- a writing component for forming a visible image pattern by irradiation of light on a recording layer formed in the optical recording medium to generate a change in optical characteristic of the recording layer ~~between a portion~~ where pits are formed with the light ~~and~~ **as compared to** a pit-less portion where pits are not formed, **wherein said optical recording medium is a recordable optical disc which is readable by a disc player.**

Claim 16 (Previously Added): The information recording system according to claim 15, wherein said writing component forms said visible image pattern by generation of a difference in reflectance as said change in optical characteristic between the portion where pits are formed and the pit-less portion through irradiation of the light on the recording layer formed in the optical recording medium.

Claim 17 (Previously Added): The information recording system according to claim 15, further comprising a data generating component for generating data of the visible image pattern to be formed in the recording layer of the optical recording medium, wherein said

writing component modulates the light based on image pattern data generated by said data generating component and irradiates the modulated light on said recording layer.

Claim 18 (Previously Added): The information recording system according to claim 17, further comprising an editing component for editing the image pattern data generated by said data generating component.

Claim 19 (Currently Amended): ~~The~~ An information recording system according to ~~claim 18,~~ for recording information on an optical recording medium, comprising:

a driving component for driving the optical recording medium;

a writing component for forming a visible image pattern by irradiation of light on a recording layer formed in the optical recording medium to generate a change in optical characteristic of the recording layer where pits are formed with the light as compared to a pit-less portion where pits are not formed; and

a data generating component for generating data of the visible image pattern to be formed in the recording layer of the optical recording medium, wherein said writing component modulates the light based on image pattern data generated by said data generating component and irradiates the modulated light on the recording layer, said system further comprising an editing component for editing the image pattern data generated by said data generating component, and a reading component for optically reading information already recorded in the recording layer of the optical recording medium, wherein said editing component detects an unrecorded area in the recording layer based on

information read by said reading component or reflected light quantity from said optical recording medium and automatically edits the image pattern data generated by said data generating component so that the image pattern matches with said detected unrecorded area.

Claim 20 (Currently Amended): The information recording system according to claim 18, further comprising a reading component for optically reading information already recorded in the recording layer of the optical recording medium, wherein said editing component automatically edits the image pattern data generated by said data generating component based on a table of contents (TOC) information or **ATIP Absolute Time in Pre-groove (ATIP)** information read by said reading component.

Claim 21 (Previously Added): The information recording system according to claim 18, wherein said editing component changes a resolution or size of the image pattern data when editing the image pattern data.

Claim 22 (Previously Added): The information recording system according to claim 19, wherein said editing component changes a resolution or size of the image pattern data when editing the image pattern data.

Claim 23 (Previously Added): The information recording system according to claim 20, wherein said editing component changes a resolution or size of the image pattern data when editing the image pattern data.

Claim 24 (Previously Added): The information recording system according to claim 19, adapted to compare the size of the image pattern to be generated with the unrecorded area for forming said image pattern and to prohibit formation of the visible image pattern when the unrecorded area is smaller than the size of the image pattern.

B' cont.  
Claim 25 (Previously Added): The information recording system according to claim 19, adapted to compare a width of the visible image pattern to be generated with a width of the unrecorded area for forming the image pattern and to prohibit formation of the visible image pattern when the width of the unrecorded area is smaller than the width of the visible image pattern.

Claim 26 (Previously Added): The information recording system according to claim 15, wherein said writing component is commonly used for recording of data of the visible image pattern and for recording of recordable data other than the data of the visible image pattern into the recording area of the optical recording medium.

Claim 27 (Currently Amended): ~~The~~ An information recording system according to claim 26, for recording information on an optical recording medium, comprising:  
a driving component for driving the optical recording medium; and  
a writing component for forming a visible image pattern by irradiation of light on a recording layer formed in the optical recording medium to generate a change in optical characteristic of the recording layer where pits are formed with the light as compared to

a pit-less portion where pits are not formed, wherein said writing component is commonly used for recording of data of the visible image pattern and for recording of recordable data other than the data of the visible image pattern into the recording area of the optical recording medium and, wherein said writing component is adapted to enlarge a spot size of the light when recording said visible image pattern from the spot size used when recording recordable data other than the data of the visible image pattern.

B' cont.  
Claim 28 (Previously Added): The information recording system according to claim 15, wherein said writing component comprises a first writing component for recording of the data of the visible image pattern onto an unrecorded area of the optical recording medium and a second writing component for recording of recordable data other than the data of the visible image pattern onto said recording layer, and wherein said first and second writing components are adapted to operate independently.

Claim 29 (Currently Amended): ~~The~~ An information recording system ~~according to~~  
~~claim 28,~~ for recording information on an optical recording medium, comprising:  
a driving component for driving the optical recording medium; and  
a writing component for forming a visible image pattern by irradiation of light on  
a recording layer formed in the optical recording medium to generate a change in optical  
characteristic of the recording layer where pits are formed with the light as compared to  
a pit-less portion where pits are not formed, wherein said writing component comprises a  
first writing component for recording of the data of the visible image pattern onto an

unrecorded area of the optical recording medium and a second writing component for recording of recordable data other than the data of the visible image pattern onto the recording layer, and wherein said first and second writing components are adapted to operate independently and wherein a spot size of the light irradiated on the unrecorded area by said first writing component is made larger than the spot size of the light irradiated on the recording layer by said second writing component.

B' cont.  
Claim 30 (Currently Amended): The An information recording system according to claim 16, for recording information on an optical recording medium, comprising:

a driving component for driving the optical recording medium; and  
a writing component for forming a visible image pattern by irradiation of light on a recording layer formed in the optical recording medium to generate a change in optical characteristic of the recording layer where pits are formed with the light as compared to a pit-less portion where pits are not formed, wherein said writing component forms said visible image pattern by generation of a difference in reflectance as said change in optical characteristic of the recording layer where pits are formed as compared to the pit-less portion through irradiation of the light on the recording layer formed in the optical recording medium and wherein said writing component is adapted to form an image pattern having a plurality of gray scale levels through provision of different sizes of the pits or different distances between adjacent ones of the pits.

Claim 31 (Previously Added): The information recording system according to claim 15, comprising a display component for displaying a simulation of the visible image pattern based on data of an image pattern edited by said editing component.

Claim 32 (Currently Amended): An information recording apparatus for recording information on an optical recording medium, comprising:

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a-driving component means for driving the optical recording medium; and

a-writing component means for forming a visible image pattern by irradiation of light on a recording layer formed in the optical recording medium to generate a change in optical characteristic of the recording layer ~~between a portion~~ where pits are formed with the light ~~and~~ as compared to a pit-less portion where pits are not formed, wherein said optical recording medium is a recordable optical disc which is readable by a disc player.

Claim 33 (Currently Amended): The information recording apparatus according to claim 32, wherein the visible image pattern is constituted by any of characters, signs, pictorial patterns and a combination of at least two of characters, signs, ~~and/or~~ and pictorial patterns.

Claim 34 (Previously Added): The information recording apparatus according to claim 32, wherein the visible image pattern is recorded in an unrecorded area of the optical recording medium.

Claim 35 (Previously Added): The information recording apparatus according to claim 33, wherein the visible image pattern is recorded in an unrecorded area of the optical recording medium.

Claim 36 (Previously Added): The information recording apparatus according to claim 32, wherein the optical recording medium carries information having been recorded therein, and the visible image pattern is recorded in an unrecorded area of the optical recording medium.

B' cont.

Claim 37 (Previously Added): The information recording apparatus according to claim 33, wherein the optical recording medium carries information having been recorded therein, and the visible image pattern is recorded in an unrecorded area of the optical recording medium.

Claim 38 (Previously Added): The information recording apparatus according to claim 32, further comprising a detection component for detecting an unrecorded area of the optical recording medium, wherein the visible image pattern is recorded on the unrecorded area of the optical recording medium based on a result of detection by said detecting component.

Claim 39 (Previously Added): The information recording apparatus according to claim 33, further comprising a detection component for detecting an unrecorded area of the optical



recording medium, wherein the visible image pattern is recorded on the unrecorded area of the optical recording medium based on a result of detection by said detecting component.

Claim 40 (Previously Added): The information recording apparatus according to claim 34, further comprising a detection component for detecting an unrecorded area of the optical recording medium, wherein the visible image pattern is recorded on the unrecorded area of the optical recording medium based on a result of detection by said detecting component.

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cont.

Claim 41 (Previously Added): The information recording apparatus according to claim 35, further comprising a detection component for detecting an unrecorded area of the optical recording medium, wherein the visible image pattern is recorded on the unrecorded area of the optical recording medium based on a result of detection by said detecting component.

Claim 42 (Previously Added): The information recording apparatus according to claim 32, further comprising a display component for displaying a simulation of the visible image pattern based on data of the visible image pattern.

Claim 43 (Previously Added): The information recording apparatus according to claim 33, further comprising a display component for displaying a simulation of the visible image pattern based on data of the visible image pattern.

Claim 44 (Previously Added): The information recording apparatus according to claim 34, further comprising a display component for displaying a simulation of the visible image pattern based on data of the visible image pattern.

Claim 45 (Previously Added): The information recording apparatus according to claim 35, further comprising a display component for displaying a simulation of the visible image pattern based on data of the visible image pattern.

B cont.  
Claim 46 (Previously Added): The information recording system according to claim 15, wherein said writing component performs recording with the light on an optical recording medium having a recording layer of a cyanine dye or azo dye.

Claim 47 (Currently Amended): An optical recording medium carrying a program which is readable by a computer provided in an information recording system, wherein the program is an image pattern writing program for forming a visible image pattern on a recording layer formed in said optical recording medium through irradiation of light on the recording layer to generate a change in an optical characteristic of the recording layer ~~between a portion~~ where pits are formed with the light ~~and~~ as compared to a pit-less portion where pits are not formed, and wherein said optical recording medium is a recordable optical disc which is readable by a disc player.

Claim 48 (Currently Amended): An information recording method for recording information in an optical recording medium, comprising the step of:

irradiating light on a recording layer formed in the optical recording medium, whereby forming a visible image pattern through generation of a change in optical characteristic of the recording layer ~~between a portion~~ where pits are formed with the light and as compared to a pit-less portion where pits are not formed, wherein said optical recording medium is a recordable optical disc which is readable by a disc player.

B' cont.  
Claim 49 (Previously Added): The information recording method according to claim 48, wherein said visible image pattern is formed to generate a difference in reflectance on the recording layer formed in the optical recording medium between an area where pits are formed with light and a pit-less area where pits are not formed.

Claim 50 (Previously Added): The information recording method according to claim 48, wherein the visible image pattern is formed through editing of data of the visible image pattern, and irradiation of light modulated based on the data of the visible image pattern on the recording layer formed in the optical recording medium.

Claim 51 (Previously Added): An information recording method according to claim 50, wherein a simulation of the visible image pattern based on the data of the visible image pattern edited through said editing.

Claims 52-55 (Canceled).

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